

# Notice of Allowability

Application No.

10/529,616

Examiner

Michael Maskell

Applicant(s)

BEZIAT ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to reply and amendment received 08/16/2007.
2. ☒ The allowed claim(s) is/are 1,7-12 and 14.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

- |  |  |
|--|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 5. <input type="checkbox"/> Notice of Informal Patent Application  |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input checked="" type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date <u>08/22/2007</u> . |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment  |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance                           |
|  | 9. <input type="checkbox"/> Other _____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Jeff Sopko on August 22, 2007. The application has been amended as follows:

In claim 9 (currently amended) delete "is likely to react" from line 16 and replace with "reacts."

In claim 1 (currently amended), delete "(1)" from line 5, delete "(2)" and "(6)" and "(6)" from line 6, delete "(2)" and "(26)" from line 7, delete "(24)" and "(6)" from line 8, delete "(2)" and "(1)" and "(6)" from line 9, delete "(2)" and "(26)" and "(28)" from line 10, delete "(28)" from line 14.

In claim 7 (currently amended), delete "(1)" from line 19, delete "(2)" and "(6)" from line 20, delete "(6)" and "(2)" from line 21, delete "(26)" and "(24)" from line 22, delete "(6)" and "(2)" and "(1)" and "(6)" from line 23, delete "(2)" and "(26)" and "(28)" from line 24, delete "(28)" and "(29)" from line 26.

In claim 8 (currently amended), delete "(1)" from line 1, delete "(6)" and "(22)" and "(24)" from line 2, delete "(30,32)" from line 3, delete "(34)" and "(38)" from line 4.

In claim 9 (currently amended), delete "(1)" from line 7, delete "(2)" and "(6)" from line 8, delete "(6)" and "(2)" from line 9, delete "(1)" and "(24)" and "(2,6)" from line 10,

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delete "(24)" from line 11, delete "(24)" from line 12, delete "(20,22)" from line 13, delete "(26)" and "(6)" and "(2)" and "(1)" from line 14, delete "(24)" from line 15, delete "(28)" and "(26)" from line 17, delete "(6)" and "(2)" and "(1)" from line 18.

In claim 10 (original), delete "(6)" and "(24)" from line 21.

In claim 11 (original), delete "(20,22)" and "(24)" from line 24.

In claim 12 (original), delete "(20,22)" and "(24)" from line 2.

In claim 14 (currently amended), delete "(26)" and "(24)" from line 9, and "(24)" from line 10.

***Allowable Subject Matter***

2. The following is an examiner's statement of reasons for allowance:

3. Claim 1 (currently amended) is allowable because the prior art does not teach or suggest wherein the first metallic material comprises a material selected from the group consisting of cast iron and steel, and wherein the second metallic material poured is a material selected from the group consisting of aluminum and aluminum alloys, with the bonding zone being composed of an iron-aluminum alloy.

4. Claim 7 (currently amended) is allowable because the prior art does not teach or suggest a bonding zone using an average thickness of between 10 mm and 5 mm.

5. Claim 9 (currently amended) is allowable because the prior art does not teach or suggest a stage of excess pouring the second metallic material in said groove over a determined period so as to cause heating of the first metallic material constituting said groove as well as washing the surfaces of this groove. Hiramatsu (Japanese patent JP

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09262658 A) teaches excess pouring of a second metallic material, but does so for the purpose of verifying a complete fill, and does not suggest doing so to the point that the surfaces are washed. Verification as taught by Hiramatsu would be complete the instant the metallic material appeared outside the groove, and no suggestion or motivation is given to continue pouring beyond that instant.

6. Claim 8 is allowable by virtue of its dependence on allowable claim 1 or allowable claim 7. Claims 10, 11, 12, and 14 are allowable by virtue of their dependence on allowable claim 9.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Maskell whose telephone number is 571/270-3210. The examiner can normally be reached on Monday-Friday 8AM-5PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrell McKinnon can be reached on 571/272-4797. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Michael Maskell

22 August 2007



TERRELL L. MCKINNON  
SUPERVISORY PATENT EXAMINER